MMSD

Mining, Minerals and Sustainable Development

October 2001 No. 6

Participation and Governance Structures

ProForest

This report was commissioned by the MMSD project of IIED. It remains the sole responsibility of the author(s) and does not necessarily reflect the views of the MMSD project, Assurance Group or Sponsors Group, or those of IIED or WBCSD

Mining, Minerals and Sustainable Development is a project of the International Institute for Environment and Development (IIED). The project was made possible by the support of the World Business Council for Sustainable Development (WBCSD). IIED is a company limited by guarantee and incorporated in England. Reg. No. 2188452. VAT Reg. No. GB 440 4948 50. Registered Charity No. 800066

iied

International Institute for Environment and Development

World Business Council for Sustainable Development

Table of Contents

1 Introduction

In April 2001, the 'Mining, Finance and Sustainability' conference was held. The conference addressed the role of financial institutions in the funding of the minerals and mining sector. It examined the business case for the financial community to differentiate between companies that manage sustainability well and those that do not. Following on from themes discussed that the conference, this report addresses the following questions:

- What are the potential governance structures in which:
  - a broadly acceptable set of sustainability management criteria and standards could be agreed in a transparent, equitable process, and
  - a certification scheme could be operated?
- What can be learned from the experience of other sectors (in particular, certification schemes operating in the forestry sector, organic agriculture, and the fisheries sector) in relation to participation, balancing stakeholder concerns, equity and transparency.
- What are the advantages and disadvantages of different types of certification for products, processes and disclosure?

Over the past decade a large number of standards have been developed in natural resources sectors. These standards aim to define acceptable management; they generally incorporate environmental, social and economic aspects as the basis for sustainability. The standards can act as a basis for improving management and as a means of distinguishing good management from poor.

This report looks at the options for the development of a standard for good management in the mining sector and how that standard could be used. The report is divided into four sections:

- developing standards looks at how standards can be developed. Who should develop standards, how and what for are discussed.
- evaluating compliance discusses the options for assessing against a standard and looks at who should carry out assessments and how this can be done.
- certification and mining looks at how a certification scheme might work in the mining sector. What and who should be certified?
- conclusions provides some guidance about the probably options and their implications for standards and certification in the mining sector.

Throughout we draw on examples from the forestry sector, particularly based on experience with the Forest Stewardship Council, the Pan-European Forest Certification scheme and others. Experience is also drawn from organic certification schemes and the Marine Stewardship Council.

2 Developing Standards

Over recent years, as long-term concerns about sustainability have gained importance, people have become more concerned about the environmental and social impacts of natural resource management. In order implement management which meets these concerns, we first need to define what 'acceptable management' is.

Acceptable management is most practically defined by using a set of criteria, which together form a standard. If an operation is known to comply with the standard, we know it is implementing acceptable management.

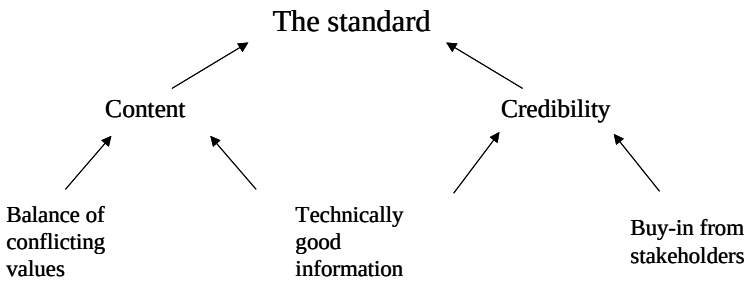
Standards for natural resource management incorporate and attempt to balance social and environmental requirements with economic aspects. The people and the process involved in developing a standard will determine the content of the standard. The content of the standard needs to be based on good technical information. It also needs to balance conflicting views about how natural resources should be managed, and what priority should be given to environmental, social and economic needs.

Therefore, a standard, needs to combine technical information with a balance of conflicting values. People must have confidence in the result. Two attributes are essential in a standard, to achieve this:

- the content – what does the standard actually require? Is it practical and feasible? Does it represent best available information and what stakeholders want?
- credibility – do the people who matter agree that the standard is both technically good and adequately reflects their views?

In many ways, it is easier to produce a good technical standard than one which aims to define 'sustainable' long-term management. Whilst a good technical standard may be produced by a number of experts combining best available knowledge, a standard aiming to incorporate conflicting values is more complex to agree.

Box 1.1 Essential attributes of a natural resource standard



To develop a standard which has both appropriate content and sufficient credibility we need to consider two questions:

- **Who and what is it for?** – who are the people who matter and with whom we want to have credibility? What target audience are we aiming to communicate with and what do they want from the standard? This is discussed in section 2.1 below.
- **Who develops the standard, and how?** The people and process involved in developing the standard will fundamentally affect the content and credibility. We need to combine:
  - technical expertise to provide good technical information, with
  - representatives of the target audience.

These groups may have unequal knowledge and power, but strongly held views and values. The process for ensuring that conflicting values are balanced is therefore essential. We discuss who and how in section 2.2.

There are two types of standard which are applicable to natural resource management:

- performance standards, which define the performance or outcome that is compatible with good management; and
- process standards, which define management processes that should lead to good management.

Before embarking on developing a standard, it is essential to consider **what type of standard** best suits the needs. This is considered in section 2.3.

Management of natural resources, even within particular sectors such as mining, encompasses a wide variety of conditions. These will be affected by product types, mine type, geophysical, environmental and social conditions. Some types of standard are more widely applicable than others.

- Process standards deal with management systems which are fairly uniform worldwide.
- Performance standards need to be more closely defined for local or sectoral conditions. In this case, a mechanism for **local interpretation** may be needed. This is discussed in section 2.4.

In most natural resources sectors there already exist some standards, ranging from in-company guidelines to sector-wide requirements. Additionally, if some stakeholders feel their views are not adequately represented in a standard, they may choose to create an alternative standard. The result is confusion and duplication of effort. Avoiding a proliferation of **alternative standards** is discussed in Section 2.5.

Finally, several international organisations exist, which set regulations or guidelines for drawing up standards.

- The World Trade Organisation's (WTO) Agreement on Technical Barriers to Trade (TBT) aims to ensure that regulations and standards do not create unnecessary obstacles to trade. The WTO has produced guidelines for drawing up and using standards.
- The International Organization for Standardization (ISO) sets international standards for a range of products and processes. ISO also produces guidelines for developing new standards and operating certification schemes.

The implications of the WTO, ISO and their guidelines for developing standards are discussed in Section 1.6.

2.1 Who And What Is It For?

The first steps in developing a standard for natural resources management is to decide who and what is it for? There are many stakeholders who may have an interest in developing a standard. Their objectives, and their power to attain their objectives, will vary.

2.1.1 Who Is It For?

We can divide these stakeholders into two groups:

- **Direct users** – people who will implement the standard in practice, or who may require other people to implement it.
- **Target audience** – people whose views on the standard matter. The standard may be a means of communicating to the target audience that there is good management.

In the mining sector, there is a range of groups who should be considered as the direct users or target audience of a standard (see Box 1.2).

Box 1.2: Stakeholders in a mining standard

- Industry, who are the direct users of the standard. It must be feasible for industry to implement the standard at reasonable cost.
- Lenders and investors, ranging from individuals to large institutions, are direct users who may require others to implement the standard and may use it to assess performance.
- Insurers may be concerned about financial, economic and social risk, and may wish to use the standard to identify low risk operations.
- Retailers are vulnerable to negative publicity campaigns and may have an interest in the standards of their suppliers. They are direct users who may require suppliers to implement the standard.
- Environmental and social NGOs may be an important target audience. NGOs often prefer performance standards (see section 1.3), which define permissible outcomes and impacts.
- Consumers whose preferences may be influenced by the media, NGOs and government. Standards aimed at this target audience need to convey a simple message and need to be supported by retailers and NGOs.
- Government can be a target audience of a standard. They may prefer standards developed through governmental processes, and independent standards which are based on these.

Stakeholders have a range of desired outcomes from a standard. Each will be prepared to accept different compromises. Groups who were not involved in developing the standard may not be prepared to accept the result as a definition of good management. This may not be important if they are not the desired target audience nor the direct users of the standard. However, if important groups of stakeholders feel excluded, they may discredit the standard or develop competing initiatives.

Experience from the forestry sector:

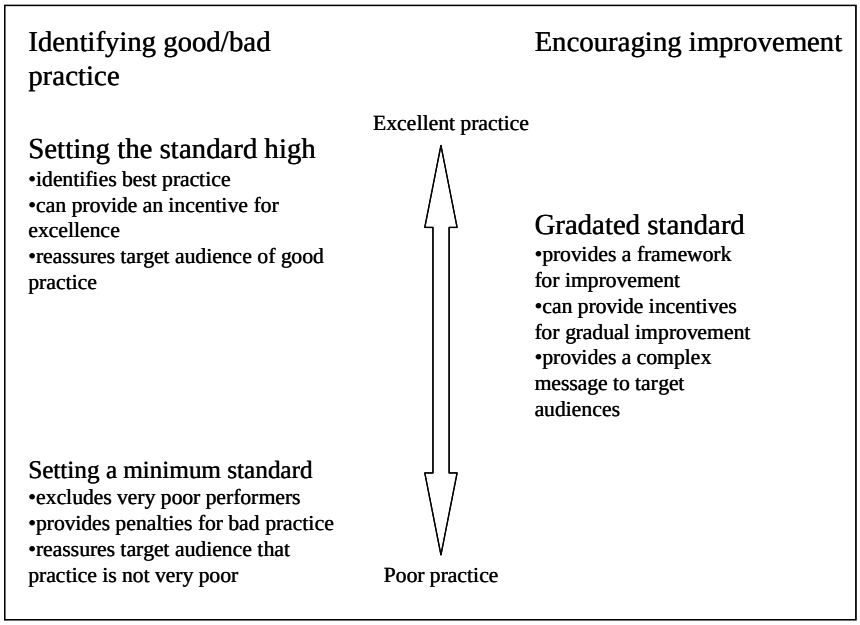
The FSC standard was developed with a main target audience of retailers, NGOs and through them, individual consumers in mind. It did not focus initially on developing strong support among producers who are the direct users of the standards. Partly for this reason, the standard met a lot of opposition from some producers, especially small forest owners, who felt unable to comply with the requirements and the cost. This has been partly responsible for the proliferation of alternative forestry standards (see section 1.5) such as the Pan-European Forest Certification scheme.

2.1.2 What Is It For?

A standard aims to provide a definition of 'acceptable practice'. There are two ways in which this definition may be used:

- **to identify an existing level of performance**, which may lie anywhere in the range between excellence and minimum acceptable practice. Compliance with the standard may be used to reassure a target audience that the required level of performance is being implemented. There may be incentives for direct users who comply completely, or penalties for those who do not.
- **to provide a framework for improving performance**, by setting out requirements for practice which is considered just acceptable, good and excellent. The message from this to a target audience is not so simple, but it may provide a more useful tool for the direct users who are implementing it. The final objective is complete compliance with all requirements of the standard.

Box 1.3: Objectives of a standard



Experience from the forestry sector: The FSC standard for forest management is relatively demanding. FSC certificates often identify existing good practice. Large forest companies in northern countries find it easier to comply with the complex requirements. It provides little incentive for the poorest performers to improve because they need to invest heavily in improvements before any benefit is seen. Small producers and developing countries find FSC certification harder to achieve.

What is important is to decide from the start who the direct users and the desired target audience are and to involve them, or their representatives, in developing the standard. It is important to establish at the outset what the objectives of the standard are, at what levels it should be pitched, and whether it will be a tool for identifying good and bad management, or for improving management.

Stakeholder themselves will have changing views and perceptions about what is possible and desirable in a standard. Furthermore, once the standard is being used in practice, it may begin to be used for purposes other than those for which it was developed. The FSC standard was developed for a target audience of retailers, NGOs and consumers. As it has become more accepted, some ethical investment funds have begun to use it as a criterion of acceptability. Other forestry companies use their FSC certified status to help sell shares in their companies. The FSC standard is not ideal for this use, as it does not place as much emphasis on economic aspects as environmental and social.

Lessons: The first step in developing a standard is to decide who the standard is for, what it aims to achieve and who has the power to oppose it.

- Important stakeholders may include direct users of the standard and the target audience it aims to communicate with.
- There may be range of objectives for a standard, which should be clearly defined at the outset.

2.2 Who Develops The Standard, And How?

Having decided who the stakeholders are and what the standard aims to achieve, the next questions are who actually develops the standard, and how? The process of developing standards for a natural resource sector is complex for two main reasons:

- we have incomplete information about the long term social and environmental impacts of management, and their effects on technical and economic aspects;
- it is necessary to balance conflicting objectives and values in the standard. For example, increasing local employment and conservation of resources, may conflict. Conflicts may be exacerbated by the lack of good information about real impacts in the long term. People holding these values may not be experts, but still have valid views.

As discussed in Section 1, the two essential attributes of a standard are its content and its credibility. The content of the standard is determined by who is involved. To get adequate content requires a combination of good technical expertise and a balance between conflicting objectives. The credibility of the standard is relies on the target audience and the users having confidence that the standard is technically sound and reflects their views. This will also be determined by who is involved and how.

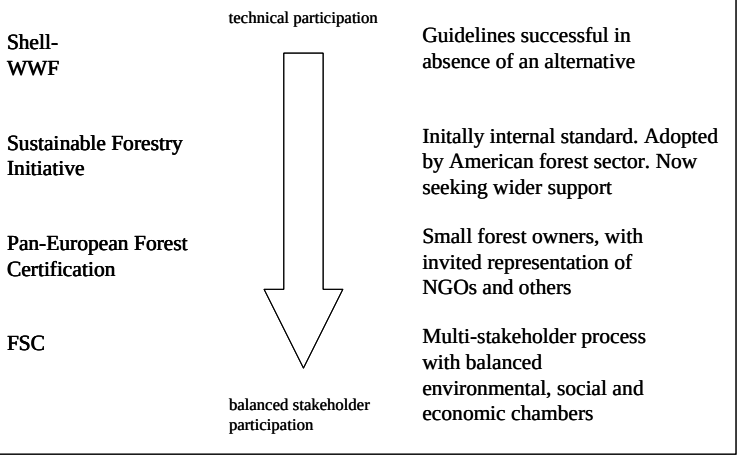
2.2.1 Who Develops The Standard?

Who is involved in developing the standard will follow from the question of who the standard is for (section 1.1). In developing a standard, it is important to identify and include in the process:

- representatives of the target audience. What do they need from the standard in order to be reassured of adequate management? What are their objectives and values?
- representatives of direct users who may be affected by the standard, and whose reaction to it can determine its success or failure. What is it practical and feasible for them to implement?
- technical experts to ensure that the resulting standard is based on good information.

The level of involvement of external stakeholders depends on who and what the standard is for.

Box 1.4 Forestry Standards – who was involved?



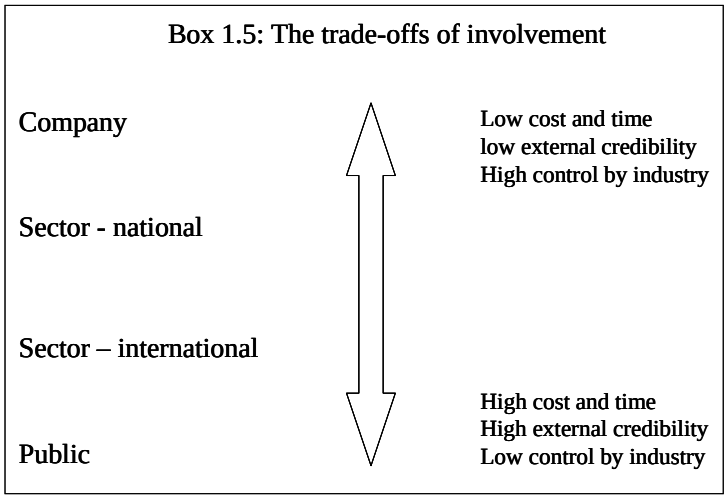
Where a standard is intended mainly for internal company use, and is not aiming to reassure an external target audience, it may be adequate to develop an **internal standard**, or Code of Practice.

This process might include consultation with technical experts, but little participation of other stakeholders. While the outcome may be technically excellent, it may have little buy-in from stakeholders. The content is likely to reflect company values; credibility with outsiders may be low. If the aim is to improve company performance, this may be adequate, but it is less useful for communicating improved performance with an external target audience.

Where there is no established alternative standard, an internal company standard may be a useful starting point. For example, Shell produced an internal set of guidelines for the management of their plantations. When the FSC standard was established and accepted, Shell sought FSC certification as a more widely recognised alternative.

A sector-wide standard may be developed within a national or international sector. Depending on who the target audience is, the process of developing a sector-standard may require more representation from external stakeholders. A sector-wide approach ensures the standard reflects the needs of the sector, but it potentially limits the acceptability of the standard among other target audiences. For example, the Pan-European Forest Certification standards are developed by national forest owners, with invited representatives of other stakeholder groups. Some NGOs have rejected the standards, partly on this basis.

A public standard developed with balanced involvement of stakeholders is likely to have the highest credibility with the public. Where it is important to have credibility among a target audience of NGOs and consumers, public involvement is important. The trade-off of this is that the sector loses some control over the content of the standard. This may result in the standard being demanding and difficult to implement. It is also a very expensive and time-consuming process.



There are trade-offs associated with the involvement of external stakeholders: as the process becomes more inclusive, the costs and time required increase, while the level of control which the industry has over the outcome decreases. It is essential to ensure that if an inclusive multi-stakeholder approach is used, industry must be prepared to live with the outcome.

2.2.2 How Is The Standard Developed?

There is a range of ways in which standards can be developed, from a small technical group within an individual company to an international process involving multiple stakeholders.

The technical aspects of a standard are generally developed by a smaller working group, on the basis of available technical expertise. Frequently this is guided by a steering group. The composition of the steering group and technical working group should reflect the interests of the users and target audience of the standard. Depending on the need for outsider participation, the draft standard may be circulated to a variety of stakeholders representing users and the target audience, for comment.

It can be helpful to start developing a standard using existing international or national requirements as a basis for discussion. This helps inspire confidence that the requirements have wider currency than the technical group alone. It also helps ensure the standard does not duplicate work already done.

Experience from the forestry sector: Standards based on existing work

The **Pan European Forest Certification Council (PEFCC)** was set up in 1999 by European small forest enterprises. The PEFC international standard is based on the Pan European Criteria, as defined by the resolutions of the Helsinki and Lisbon Ministerial Conferences of 1993 and 1998 on the Protection of Forests in Europe. These were in turn based on the Statement of Forest Principles developed at the 1992 UN Conference on Environment and Development in Rio de Janeiro. The Pan-European criteria provide general guidance for good forest management at a Europe-wide level and act as a basis for the development of national interpretations.

As a result, the PEFC standards are underpinned by long-standing government processes and agreement. This provides a sound basis for support by government and is also likely to be supported by industry. It may be less effective in ensuring support from non-government groups.

The **Forest Stewardship Council (FSC)** developed its own set of international Principles and Criteria. This was done very early on in the development of the FSC by working groups involving the early membership of the organisation which was mainly environmental and social NGOs and retailers.

The resulting standard has broad support from those groups which were initially involved, particularly environmental NGOs, social organisations and retailers, but has attracted less support from governments and some segments of industry.

The process of development of the standard may vary from meeting of a small working committee and circulation of drafts for comment, through to large, international, multi-stakeholder meetings. The development of a standard is generally an iterative process: successive drafts are developed and commented on.

Professional facilitation of meetings can often help discussions produce positive results. Time for informal discussions and horse-trading is important. Setting ground rules may allow participants to discuss freely, negotiate and change their positions on issues.

Field testing is an essential step in developing a standard. Field testing in a range of conditions and countries helps to clarify how a standard can be implemented and evaluated. Field tests also allow time for people to discuss the requirements in an informal atmosphere, which is likely to lead to better co-operation.

At the outset, it is useful to agree what the format of the process will be:

- what is the timeframe for completion?
- how many drafts will be produced before the final version?
- how will comments on the standard be incorporated into subsequent drafts? Does this need to be a transparent process?
- who will actually compile the drafts and who will pay for their time?
- how much work will be done in formal meetings, and how much by written communication?
- how many field trials will there be and where?

Once the final draft of the standard is complete, the process for the agreement and adoption is crucial. In most standards development processes, the technical working group submits the proposed standard to a decision by either a Board or General Assembly for approval. In some schemes, amendments may be proposed during this stage.

A scheme which aims to provide maximum credibility with external stakeholders needs to ensure that they are empowered in decision-making, in sufficient numbers to have an

impact on the resulting standard, and in a process which ensures that minority voices are heard. There are a number of models available:

- **requiring consensus**. This is time-consuming and may never arrive at a conclusion. Requiring consensus *where possible* with the option of voting ensures decisions can be made.
- **allocating dedicated voting rights** to different interests (eg. environmental, social, financial, government). This ensures balance between interest groups, but means that members of under-represented interests have a proportionally larger say in outcomes.
- **simple majority voting**. This makes decision-making quicker but does not develop consensus between groups. Outcomes will reflect the largest interest group and minority voices have little opportunity to be heard.
- **committee decision**. This delegates control to a Board or other committee to represent the interests of stakeholders. It is quick but unlikely to have wide 'buy-in'.

Experience from the forestry sector: Who approves the standards?

The FSC is a membership organisation. The content of the standard must be approved by the membership. Members are allocated to one of three chambers (economic, environmental and social) and within those to a northern or southern sub-chamber. This maintains a balance of interests without limiting the number of members. Each chamber has 33.3% of the voting power in the General Assembly. Within each chamber, Northern and southern sub-chambers each have 50% of the votes. General assembly decisions are adopted by a vote of 66.6% of the total voting power.

This structure ensures that the key decisions always reflect a balance between the three interest groups, and are not prone to being hijacked by one interest group. It also means the environmental and social NGOs play a prominent role in the process and members of under-represented chambers have a proportionally larger say in outcomes than members of better represented chambers.

When the FSC was established, and the P&C were approved by postal ballot, voting was divided into two chambers. An economic chamber was allocated 25% of voting rights; a social, environmental and other chamber had 75% of the vote. This allocation has been changed, to permit better buy-in from the economic sector. However, the FSC Board still has a strong emphasis on environmental and social aspects. Two Board places are allocated to economic interests, while the remaining 7 seats are designated for representatives of the social and economic chambers. National interpretations are approved by the FSC Board.

The Pan European Forest Certification Council (PEFCC) was set up in 1999 by European small forest enterprises. The Members of PEFCC are national PEFC governing bodies. These are established by the National Forest Owners' Organisations, who can invite other organisations to join them. National PEFC bodies develop national interpretations of the Pan-European Criteria. The Members elect the PEFC Board. All Members have between 1 and 3 votes, according to the annual volume of timber cut in the member's country. National standards are approved by the PEFCC Board.

These governance structures mean that FSC has strong support among environmental and social NGOs as well as from retailers who need credibility with the NGOs (eg. retailers). FSC has less support from other industry sectors. In contrast PEFC has strong support among small forest

enterprises and other industry sectors, as well as some governments who welcome the use of the Pan-European criteria. PEFC has little support from environmental NGOs and retailers.

A standard which is developed with financial institutions as a major target audience will need to place specific emphasis on this aspect. For example, there may be a certain number of dedicated seats on technical working groups and/or a certain proportion of voting rights reserved for representatives of the financial sector. The trade-off for this is that other interests may be excluded, and thereby alienated.

Lessons: It is essential that the people who develop the standard and the process of development result in adequate content and credibility:

- A combination of balanced technical working groups and a clear voting structure contribute to good technical content and credibility.
- The level of credibility and consensus surrounding a standard depend largely on who was involved in developing it and the voting system for approval.
- It is helpful to look at existing international and national standards and use common elements as a starting point.
- Field tests and working group meetings in a variety of countries facilitates discussions and compromise and increases the practicality of the standard.

2.3 What Type Of Standard?

Two main types of standard are generally recognised:

- Performance standards, which define the performance or outcome that is compatible with good management, and
- process standards, which define management processes that should lead to good results

Performance standards specify the level of performance or results which must be achieved in the field, but do not specify how this should be done. There is no requirement for any particular management system, but they do specify the minimum performance which must be achieved.

Performance standards for natural resource management generally need local interpretation. For example, it is impossible to define a single generic performance standard for road construction and maintenance which is globally applicable, because acceptable standards are affected by topography, soil types, vehicle type, climatic conditions, and so on. Local interpretation may be done by a company implementing the standard, a certification body, or a local initiative (see 2.4).

Performance standards generally apply to a particular operation at a defined location. All products which come from a location which meets the standard, come from a well managed source. This allows product labelling to be associated with performance standards.

Many aspects of the FSC standard are performance requirements, which demand specific outcomes in the field.

Process standards are also known as system-based standards. They specify the management systems which must be implemented and should lead to good performance. They do not specify any minimum level of performance which must be achieved. Instead they require an organisation to review their performance, set their own performance targets and use the defined management system to ensure that they attain their targets.

A process standard might define, for example, that a mining company must evaluate its current levels of pollution, set its own targets for reducing pollution and monitor its attainment of that target.

Process standards provide a framework for improvement. They specify generic management systems and so are easily applied to a wide range of operations. An international process standard does not need national interpretation. In addition, certification against a process standard provides recognition of the commitment to improve.

Process standards usually apply to a management organisation or company rather than a particular site. Since process standards do not provide any guarantee of performance at any particular site, they are not normally associated with a product label. The lack of defined performance requirements means that two companies both certified against the same process standard could have different levels of performance in the field.

The most important process standard is the Environmental Management System Standard, ISO 14001.

Box 1.6: Comparison of process and performance standards

	Process standard	Performance Standard
Ensure a guaranteed minimum level of performance in the field	No	Yes
Give recognition of ongoing improvements in management	Yes	No
Provide a management framework	Yes	No
Apply to all operations worldwide without being adapted	Yes	No
Allow product labelling	No	Yes

An important difference between process and performance standards is how they balance conflicting values. Process standards require companies to have a system for balancing conflicts, but does not say how this should be done. In general, performance standards for natural resources try to define how conflicting values should be balanced in the standard itself. The development of a performance standard is likely to be more contentious than for a process standard, because conflicts need to be resolved in the standard. The development of a national interpretation is particularly important for this process (see section 2.4).

Many standards for environmental and social performance, such as the FSC standard, Marine Stewardship Council and organic standards are actually a combination of the two approaches. Management processes and the outcomes which these should achieve are defined in the standard.

Experience from other sectors: Linking performance and process

The MSC's Principles and Criteria for Sustainable Fishing are a combination of performance and process requirements. For example:

Principle 3: 'The fishery is subject to an effective management system that respects local, national and international laws.' This is a *process requirement*.

The Criteria under Principle 3 are a mixture of process and performance requirements. For example:

- clear objectives and a consultative process – *process requirements*
- economic and social incentives for sustainable fishing – *performance requirements*
- specify measures and strategies to control exploitation- *process requirement* including:

  setting catch levels that will maintain the target population… -performance requirement

Operational criteria under Principle 3 emphasise performance requirements. For example:

- make use of fishing gear… to avoid capture of non-target species – *performance requirement*
- not use destructive fishing practices – *performance requirement*
- minimise operational waste – *performance requirement*

Process requirements are more generally applicable. The performance requirements such as 'catch levels' or appropriate 'fishing gear' need local definition. In the absence of a national interpretation, this has to be done by the company itself.

Where a standard is designed to reassure stakeholders about the environmental and social performance of operations, a standard which contains some performance elements associated with particular sites is preferable. This is because process standards do not provide a guarantee that known minimum levels of performance are being achieved by all operations which comply with the standard. However, financial institutions and lenders might be more supportive of process elements in a standard, as they focus on management systems at a company level.

Lessons: Performance and process standards deliver different benefits. They are complementary and can be combined in a standard.

- Process standards are widely applicable and do not need local interpretation. They apply at a company or management level, not just to a specific site. Process standards provide a framework for improvement, but do not guarantee outcomes or provide guidance on how to balance conflict.
- Performance standards are more difficult to formulate and need local interpretation. Performance standards guarantee outcomes on the ground. Product labelling is easier with performance standards.
- For financial institutions a combined approach would give flexibility, and could apply at both the management and a site levels.

2.4 Local Interpretations

Where performance standards have been developed for natural resource management, they have generally been generic standards linked to a local initiative to provide interpretation.

Natural resource standards need to be written in generic terms, to allow them to be applied to a range of countries and situations. It is impossible to develop a standard which is technically applicable to all situations but detailed enough to allow consistent interpretation. Generic performance requirements need to be better defined for local conditions.

As well as technical aspects, a natural resource standard involves a balance of conflicting values. These values and the balance between them, vary from place to place. Standards can be developed for particular countries, types of operation or products. We refer to all these standards as 'local interpretations'.

> **Experience from the forestry sector:** Using performance standards without local Interpretation
>
> The FSC standard contains a large number of performance requirements. In a number of countries FSC national initiatives have developed local interpretations of the standard. However, where there is no national initiative, as in many developing countries, the FSC allows assessments to be done against the generic standard as an interim solution. This has the advantage of allowing certifications to go ahead without having to wait for a local interpretation.
>
> However, it does cause some problems of interpretation. For example, the FSC standard requires that plantations should consist of a mosaic of stands of different ages and rotation periods. It does not state how big these stands should be, or how different the ages and rotation periods should be. This needs to be defined locally.
>
> In South Africa, plantation forestry companies have defined their own limits for these requirements, without taking into account the views of other stakeholders. This has led to some challenges from stakeholders, which has the effect of undermining the standard itself.

National interpretations need the same attributes of content and credibility as an international standard. The process for developing national interpretations involves balancing conflicting values, incorporating good technical information and gaining buy-in from stakeholders. Where the process for developing an international standard has not been very participatory, the local interpretation process may provide an opportunity for greater participation of stakeholders. This gives the standard better credibility in the countries where it is used.

The process is as important as the product. The mechanism for approving national interpretations as acceptable versions of an international standard needs to evaluate the process as well as the standard itself.

Experience from the forestry sector: The FSC has developed an extensive network of national initiatives. The policy impacts of the FSC National Working Groups' work on national interpretations may be substantial. As Bass comments:

FSC National Working Groups – and their work of local standards development and testing – have offered participatory, multi-stakeholder fora which have been defining good forestry, how to assess it, and who should be responsible. In countries where such provisions did not exist, these impacts have had knock-on implications, changing the forest policy agenda where it may often have been static, and pointing to legitimate actors who may have been invisible.

Guidance on the process for developing national interpretations and a mechanism for approving them is essential. National working groups can provide an excellent participatory, multi-stakeholder forum for bringing together diverse and conflicting interest groups to develop a practical definition of 'good management'. The detailed 'nitty-gritty' needs to be defined and agreed. As with an international standard, a combination of technical expertise and values of other stakeholders is important.

In situations where the international standard-setting process has not been very participatory, national interpretation processes can provide an opportunity to bring in other stakeholders.

Experience from the forestry sector: Problems with national initiatives.

Clear information about the role and responsibilities of national initiatives is needed to prevent problems in the development of national interpretations. Where clear guidance is not provided, it can lead to standards being developed which do not reflect the aims of the original standard and which are not acceptable to stakeholders.

FSC National Working Groups initially received little guidance on the process required to produce an FSC-endorsed standard. In Canada, a Working Group was established which did not have a balance between environmental, economic and social chambers. This led to an acrimonious debate, which wasted a year during which progress could have been made. Eventually the original Working Group was replaced by one with the required balance, which is now making progress.

Lessons: Generic performance standards usually need local interpretation.

- Using a generic performance standard can cause problems of interpretation.
- National interpretation processes need clear guidelines on the process for doing this.
- Where the international process has not been very participatory, national interpretation my provide an opportunity.
- The impacts of National Initiative Working Groups can extend beyond the task of developing a national standard.

2.5 Alternative Standards

In Section 1.1, we discussed the need to involve all important stakeholder groups in the development of a standard. People who have not been involved in the process, but feel they have important views which should be taken into account, may decide to develop their own alternative standards.

The result is confusion, a waste of money and undermining of the potential for development of a truly inclusive standard.

There are two issues to consider about alternative standards:

- how to avoid them developing
- how to deal with them once they exist.

Avoiding alternative standards. There are three main reasons why people may develop alternative standards.

- people in different locations do not know about other standard development processes going on. Several different standards may be developed in parallel, especially in the absence of an international co-ordinating body.
- people with legitimate concerns are excluded or omitted from the standard development process. People who feel their concerns have not been heard may be antagonised and develop an alternative standard as a reaction. A good standard development process, which identifies and involves important stakeholder groups should avoid some pressure for alternatives.
- people do not like to lose control. Natural resource sectors are often dominated by people who are not accustomed to compromising with external stakeholders. Rather than join a multi-stakeholder process, these people may prefer to develop their own standard. In most sectors, there is a majority of more moderate opinion who are prepared to compromise. Including the moderate majority in the standards development isolates the more extreme voices. However, if moderate people are omitted from the process, they may join with more extreme views in developing alternative standards.

Government support or opposition can be important in determining the success of competing alternative standards. Governments are often suspicious of heavy NGO involvement and control of standard development. They are also likely to prefer standards based on recognised intergovernmental initiatives.

Experience from the forestry sector: A proliferation of standards

There are now a large number of forestry standards, developed by different national and international bodies. Each initiative has started among a limited group of stakeholders. All are now trying to widen their support base to other stakeholders.

There are a number of reasons for the proliferation of alternatives to the FSC standard:

- small owners were not actively included by the FSC. They felt it was too expensive and discriminated against them;
- FSC was initially based on an NGO-retailer alliance, and did not recognise the gap between them and the rest of the supply chain;
- some industry representatives fought any NGO involvement;
- some industry groups could not accept a loss of control.

Dealing with alternative standards. A proliferation of alternative standards leads to confusion about what they all mean, and whether they mean the same thing. All standards lose credibility. Mutual recognition between standards can reduce the confusion. Criteria need to be developed to assess whether standards are equivalent to each other, in terms of development process, content and application. This is complex and expensive. It is generally better to avoid the proliferation of alternative standards in the first place.

Experience from other sectors: Mutual recognition of alternative standards

Organic standards have developed separately in many countries. Certification bodies have normally developed their own standards in the absence of an umbrella organisation. To address this situation, the International Federation of Organic Agriculture Movements (IFOAM) has developed the IFOAM Basic Standard, to be used as a framework for organic standards worldwide. This sets out the minimum requirements of organic standards acceptable to IFOAM.

In Britain, the Soil Association is the best known organic certifier. The Soil Association carries out its own assessment of the content and application of other certifiers' standards, to decide whether to endorse them on products sold in Britain. This situation adds to the costs of certification and confusion surrounding the equivalency of different standards.

Forestry: As a result of concerns among different stakeholder groups, a number of different forest standards have been developed. The most important of these have been the Forest Stewardship Council (FSC) standard, the Canadian SFM standard, the Sustainable Forestry Initiative of the American Forest and Paper Association (AF&PA) and the Pan-European Forest Certification (PEFC) system. This immediately resulted in a long and intense international debate about which standard and certification system was best, taking valuable time, energy and resources which could otherwise have been going into implementation of good forest management.

In addition, it very quickly it became apparent that this proliferation of standards was going to be costly and confusing for both forest owners who would have to decide which one to implement, and to consumers who would be asked to decide which one to buy. As a result, a proposal was made to develop a process of mutual recognition. So far this has not been successful for a number of reasons, in particular:

- it has been resisted by many NGOs, key target audiences for any standard associated with product labelling, on the basis that they were happy with FSC and did not want the further work involved in mutual recognition.
- as recent work on this topic has shown, mutual recognition between the complex standards and certification processes required for forest certification will itself be such a complex process, if done credibly, that the costs are also likely to be very high.

In summary, the development of multiple standards and certification systems has proved mainly negative for forest certification. It would almost certainly be much more efficient to design a

scheme from the beginning which will include and be supported by all key stakeholder groups, rather than risk a proliferation of standards at a later date.

Lessons: The proliferation of alternative standards leads to confusion about what standards mean, increases costs and decreases the credibility of all the standards.

- Avoiding a proliferation of alternative standards is better than dealing with them afterwards.
- Identify important stakeholder groups and ensure they are involved in developing the standard.
- limit the appeal of extreme voices by keeping moderate people on-board.
- to encourage government support, use existing government-endorsed protocols as a basis for development.
- if a number of alternative standards are developed, criteria can be developed to assess whether they are equivalent, but this is expensive.

2.6 ISO, WTO And Their Guidelines

One of the most important organisations with relation to the development of standards and certification is the **International Organisation for Standardisation (ISO)**, an independent body based in Geneva.

As well as co-ordinating and managing the development of hundreds of international standards for different industry sectors, ISO has also produced a number of Guides, the most relevant of which are:

- ISO Guide 59: 1994 Code of Good Practice for Standardisation.
- ISO Guide 61: 1996 (EN 45010: 1998) General requirements for assessment and accreditation of certification/registration bodies.
- ISO Guide 62: 1996 (EN 45012: 1998) General requirements for bodies operating assessment and certification/registration of quality systems.
- ISO Guide 65: 1996 (EN 45011: 1998) General requirements for bodies operating product certification systems.
- ISO 14012: 1996 (EN 14012: 1996) Guidelines for environmental auditing – Qualification criteria for environmental auditors.

These ISO Guides are based on several decades of experience and provide excellent baseline requirements which should always be met. It is important to remember that ISO Guides are designed to be applicable in as many situations as possible, so they do not always cover all the issues which are important in a specific sector such as mining. But they are extremely helpful in outlining the basic requirements for efficiency and credibility.

ISO Guides are also important because ISO works with the World Trade Organisation (WTO) to try to ensure that certification meets WTO requirements and does not become a technical barrier to trade (TBT).

The **World Trade Organisation (WTO)** is an intergovernmental organisation. The purpose of the WTO is to facilitate free trade of a range of goods and services. The WTO has no specific agreement dealing with environmental matters, although some of the trade agreements include provisions relating to the environment.

The WTO Agreement on Technical Barriers to Trade (TBT) aims to ensure that national standards and certification procedures do not create unnecessary obstacles to trade. Countries are encouraged to use existing international standards as a basis for developing national standards, where appropriate. There is a Code of Good Practice (Annex II to the TBT Agreement[1]) for developing standards.

One of the most important requirements of the WTO, is that governments may not prevent the import into their country of materials on the basis of the production process used to make them. This means that states may not require compliance with a natural resource management standard as a condition of import.

Box 1.7: Requirements of the WTO Agreement on Technical Barriers to Trade

Important requirements of the TBT for developing international voluntary standards:

- when developing standards, avoid duplication or overlap with other standards and seek to achieve national consensus.
- ensure that the standard development process is democratic, in accordance with the Code of Good Practice (which requires at least 60 days for the submission of comments).
- there must be a procedure for reviewing and responding to complaints about the operation of a scheme.

3 Evaluating Compliance

A standard sets out a definition of good management. The standard is usually implemented by companies. Unless it is a very small company, we generally need a way to check whether the standard has been implemented in practice. How compliance with a standard is best evaluated depends on who wants to know. Compliance can be checked:

- internally, within the company (1st party)
- by an organisation with a direct link to the company (2nd party)
- by an independent professional body (3rd party)

Who evaluates compliance is discussed in section 3.1.

[1] available on the website at www.wto.org

There is a range of processes by which compliance with a standard can be checked. These divide into two main choices:

- a one-off assessment where compliance with the whole standard is assessed in one audit.
- step-by-step assessment, where the requirements of the standard are broken down into steps and each step checked separately.

How to evaluate compliance is discussed in section 3.2.

Where compliance with a standard aims to reassure an external target audience, it is essential to ensure that not only the standard, but also the evaluation process is credible. Different people evaluating the same operation against the same standards should reach the same conclusion. **Ensuring credibility** is discussed in section 3.3.

3.1 Who Evaluates Compliance?

As with the development of standards, there is a range of ways of checking whether or not a standards has been implemented in practice. Each of these approaches has advantages and disadvantages in terms of cost, reliability, and credibility. Evaluations of compliance can be divided into three basic types:

First party assessment

First party assessment is carried out internally. The company appoints a person or team from its own staff to check if the standard is being met. Internal audits are an example of 1st party assessment.

1st party assessments are good for:

- improving internal understanding of a standard
- identifying a company's own non-compliances with a standard and dealing with them
- keeping costs low.

The disadvantage of 1st party assessments are:

- internal auditors, especially in small companies, may not be trained in auditing, or the requirements of the standard, so results may be inconsistent;
- it does not provide credibility with external stakeholders, because there is no external over-view.

Environmental management system standards, such as ISO 14001, require companies to carry out internal (1st party) audits.

Second party assessment

Second party assessment is carried out by an organisation with direct links with the company being assessed. A financial company might carry out a second party assessment of the organisations in which it invests.

2nd party certification has the advantage

- it provides information for a specific purpose
- it permits the 2nd party to collect the information it wants directly, which can give them greater confidence
- it helps build a personal relationship between organisations

2nd party certification has the same disadvantages as 1st party assessments.

- it does not provide credibility with stakeholders
- auditing may not be a core competence of the 2nd party, which can incur extra costs and inefficiencies.

Third party assessment

Third party assessment is carried out by an independent, professional body (a certification body).

3rd party assessment has the advantages that:

- it provides independence and credibility with outsiders
- it provides an opportunity for a company's interpretation of the standard to be discussed with outsiders, who may bring new insights
- auditors are trained in using the standard leading to more consistent results.

The disadvantage of 3rd party certification is that it may be more expensive. The cost may exclude smaller operators.

Many well known certification schemes are 3rd party schemes, including the FSC, MSC and Organic Certification.

The choice of a 1st, 2nd or 3rd party assessment depends on the objectives of implementing the standard. 1st party assessments are adequate for internal assurance of compliance. 2nd party may be adequate for a financial company to assure itself that an organisation it invests in is meeting the standard it requires. 3rd party assessment may be needed to assure stakeholders that a standard is being implemented. Furthermore, if the independent 3rd party approach is chosen, this can be either on an *ad hoc* basis, or under accreditation (see section 2.3) as part of a formal certification scheme.

It is possible to combine the use of 1st party assessments with 2nd or 3rd party assessments. A company can use 1st party assessment to ensure it is implementing the standard before calling in 3rd party auditors to provide external confirmation and credibility.

2nd and 3rd party auditors can use the results of 1st party audits to detect and focus on problem areas. The reliability of the 1st party audits needs to be checked first by the external auditors. If they are reliable, issues which do not appear to be problematic in 1st party audits can be sampled at a lower intensity than obvious problem areas. This can reduce the time and costs required for 2nd and 3rd party assessments.

Experience from the forestry sector: 1st and 3rd party assessments

Many of the larger forestry companies, such as AssiDomän in Sweden, have their own environmental 1st party assessment systems. Some maintain an environmental division which specialises in internal environmental audits. The company carries out 1st party assessments of its own operations throughout the year, as part of its ISO 14001 environmental management system. 3rd party auditors under the FSC certification scheme can use the internal audit records to help focus their sampling during monitoring visits. They also have to ensure that the internal system is reliable, and make random checks to ensure problems are not being hidden or missed.

This intensity of internal and external auditing is only really an option for large companies. It is not cost effective for small and medium companies.

Lessons: There is a range of options for who evaluates compliance with a standard.

- who evaluates compliance depends on who needs to know the results, what the costs are, and the need for credibility with external stakeholders.
- first, second and third party assessments can be used in combination, but this is generally only an option for large companies.

This report aims to discuss the options for standards and evaluation for the financial sector and external stakeholders. The rest of this chapter discusses the options for second and third party assessment.

3.2 How To Evaluate Compliance?

There are two main alternative aims for implementing a standard and evaluating compliance with it:

- to recognise good practice, defined as meeting the whole standard, and reward operations which achieve it
- to identify where there is poor practice, defined as not meeting the standard, and to reward improvement.

Near the top end of the environmental and social performance scale, these two aims are similar. There may only be a few areas where a good company does not meet the standard. A small improvement will be rewarded.

Among poorer performers the difference is important. They will not meet the whole standard in the near future, so see no incentive for improvement. They may be able to improve, however, if there are incentives. The second option is more attractive for poorer performers.

The most appropriate method of evaluating compliance depends on whether the standard is aimed at rewarding existing good performers, or encouraging gradual improvement of poorer performers. We call the two alternative 'make-or-break' and 'step-by-step' assessment.

3.2.1 Make-Or-Break Assessment

Most certification schemes operate on a 'make-or-break' basis. Operations apply for certification against a standard and, following an assessment, receive a yes/no result. The certificate which accompanies a positive result provides access to markets or higher prices and rewards good performance.

Box 2.1 A typical make-or-break process Certification schemes vary in the exact process for carrying out assessments, but most apply the following steps:

- Application for assessment Certification is voluntary so organisations have to apply
- Pre-assessment by the certification body, to identify gaps between current performance and the requirements of the standard
- Gap close-out period The applicant addresses any gaps identified by the pre-assessment.
- Main assessment An intense audit by a team of specialists, to assess compliance with all aspects of the standard. At the end of the assessment, the team makes a recommendation for or against certification and highlights any non-compliances with the standard.
- Certification decision is made by a panel convened by the certification body. If positive, a certificate is issued.
- Monitoring Periodic monitoring visits following certification ensure non-compliances are addressed and standards are maintained.

Make-or-break assessment works well where the aim is to assure stakeholders that organisations are only rewarded when they comply substantially with the whole standard. This approach is generally favoured by retailer/NGO/market driven schemes where a clear message to the target audience is needed.

An essential part of make-or-break assessments is on-going monitoring. This ensures that any minor areas of the standard where there were non-compliances at assessment, have been improved within a given time frame. It also ensures that the standard continues to be met following assessment.

The drawback of make-or-break assessment is that it makes a crude cut-off line between those who meet the standard and those who do not. A scheme that is designed to reassure NGOs and consumers, will often demand high standards. The danger is that only the very best operations can achieve the standard. Existing good practice is identified, but there is little incentive for organisations at the poorer end of the spectrum to improve.

3.2.2 Step-By-Step Assessment

Step-by-step assessment provides an alternative. This aims to provide incentives and recognition for organisations at the poorer end of the performance spectrum to improve and move towards full compliance with a standard. Both the standard and the assessment process need to be designed with this in mind. While it improves, the company is rewarded through access to marketing networks, finance or other support. Full compliance with the standard needs to bring further reward.

The standard can be divided into modules, which companies undertake in a defined time frame. The process starts with the most basic requirements, such as having legal authorisation to operate. Later stages cover best practice elements, such as training needs assessment for employees. The final step is full compliance with the standard.

Step-by-step assessment promotes recognition of operations which currently DO NOT meet the standard, but have made a commitment to improve. If the improvements are not actually made the system becomes no better than 'greenwash'. It is therefore essential that there is a mechanism in place to ensure that companies are genuinely committed to meeting the standard and that adequate progress is being made. It is important to ensure that there are:

- clear minimum standards for receiving any incentives.
- commitment to full compliance with the standard within a defined timeframe;
- a clear timetable for improvement;
- monitoring of progress relative to commitments;
- a mechanism for expelling organisations who do not meet their commitments.

Experience from the forestry sectors: Producer groups

The FSC certification standard has a good level of credibility among environmental and social NGOs and other stakeholders, partly because the standard is set at a relatively high level. It provides guarantees about the level of performance in the field. However, it has tended to identify existing good practice. 84% of certified forests are in developed countries and 85% in large operations which have the resources to ensure they comply with the standard. Although the FSC was initially conceived as a mechanism for halting destructive forestry in the tropics, it has instead identified good practice in temperate areas.

As a result of this, some NGOs and analysts are proposing Forest Producer groups to provide support and incentives to forest managers to move towards meeting the FSC's requirements. Producer groups are being established in a dozen countries; guidelines for ensuring they operate consistently are in development.

Financial institutions may wish to identify various levels of environmental and social performance, for which a step-by-step approach would be appropriate. Investments could be directed to the level which best suits the ethical demands of each fund. Deeper green funds could be directed to organisations which comply with the entire standard; paler green funds could be directed to companies which have completed several 'modules'.

Step-by-step assessment may be more difficult to use for a scheme with a lot of public input. It is generally more acceptable to make provide good publicity and rewards to operations which meet a clearly defined, simply stated standard. A step-by-step approach may be better suited to internal use, unless it is very clear exactly what each step means.

A make-or-break scheme is a relatively low maintenance way of distinguishing good from bad operations. There is a simple message, which can be backed up by third party audits. The scheme may, however, exclude a large number of companies. A step-by-step approach

may help build a long term relationship, but it provides a more complex message to stakeholders and entails increased risk of 'greenwash'.

Lessons: The process for evaluation of compliance with a standard depends on the objectives of the standard.

- where the aim is to identify and reward compliance with the whole standard, a make-or-break approach is appropriate
- where the aim is to provide incentives for improvement of poorer performers, a step-by-step approach is better, but there is a higher risk of 'greenwash'.
- NGOs, retailers and consumers are likely to prefer a make-or-break approach.
- Financial institutions wishing to distinguish several levels of performance for investment purposes may prefer a step-by-step approach to assessment.

3.3 Ensuring credibility- a certification scheme?

As with the standard it is important for an assessment process to have credibility. As noted in section 3.1, part of this credibility derives from who carries out the assessment. Where a high level of public credibility is needed, there are two further steps that may be considered:

- accreditation – certifying the certifiers
- public input – opportunities to participate.

So far this report has discussed natural resource standards and the evaluation of compliance. These elements may be combined with accreditation to form a certification scheme.

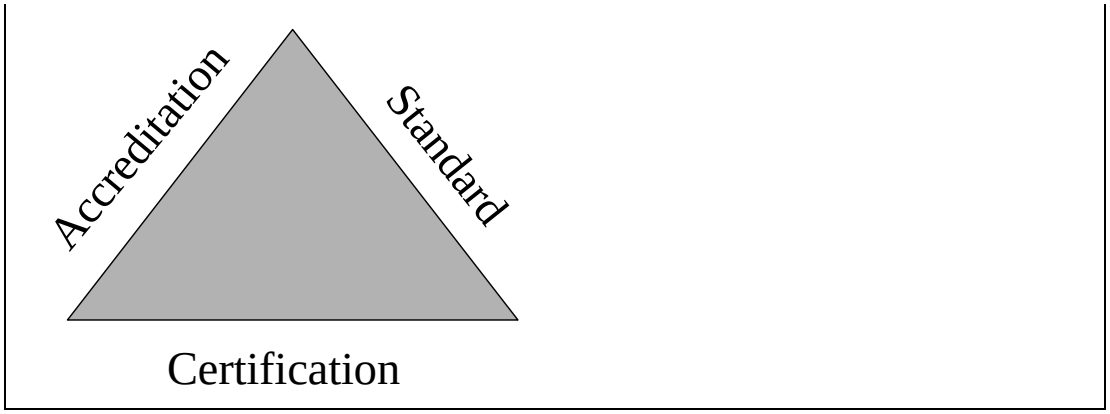
A certification scheme consists of three basic elements:

- a standard, which defines good management.
- certification – evaluation of compliance with the standard by an independent 3rd party certification body
- accreditation – a mechanism for approving competent certification bodies.

Some certification schemes go further in order to ensure public credibility. The FSC certification scheme includes requirements for public consultation and requires information about forest management operations and certification assessments to be made publicly available.

Box 2.2: The elements of a certification scheme

The three elements of a credible certification scheme are often represented schematically as the three sides of a triangle, to emphasize that each one is an essential part of the whole.



3.3.1 Accreditation

Accreditation aims to increase the credibility of certification by controlling who is authorised to evaluate compliance with the standard. Accreditation thus is certification of the certification bodies. In theory, all accredited certification bodies should come to the same conclusion when assessing against the same standard.

ISO guidelines for accreditation bodies are set out in ISO Guide 61, which states that accreditation bodies are responsible for:

- defining the certification process, and
- checking certification bodies' compliance with the defined process.

The credibility of the accreditation body is important. Traditionally, accreditation has been carried out by national accreditation bodies. In the UK most accreditation is provided by the UK Accreditation Service (UKAS). However, there is an increasing need for global competence and certification schemes that transcend national boundaries.

National accreditation bodies in different countries sometimes have different competencies. This has led to concerns that accreditation bodies in one country may not apply equivalent standards to those in other countries. There is now discussion about the possibility of establishing a new international accreditation service for the natural resources sector.

Experience from other sectors

The lack of an established international accreditation service has led some of the newer certification schemes, particularly in the natural resources sectors, to develop their own processes. This has the advantage of allowing them to control who is authorised to carry out certification against their standards and to have uniform international coverage. However, it is both costly and complex to run and may stretch the resources of a certification scheme. ISO guidelines also suggest that standard-setting bodies should be separate from accreditation bodies.

Both the FSC and the MSC developed their own accreditation services from the start of their certification scheme, in a top-down, globally uniform manner. This helps maintain parity between certificates issued by different certifiers in different parts of the world, which would be more difficult if relying on national accreditation services. PEFC, utilises national accreditation services: this has advantages of efficiency and reduced cost, but may suffer from the lack of detailed guidelines for accreditation of forestry certification bodies and differences in national application.

Organic certification has been more bottom-up in its development. Individual certification bodies have developed their own standards and certification procedures. The International Federation of Organic Agriculture Movements (IFOAM) provides an accreditation programme, but this is not universally accepted as the absolute guarantee that accredited certification bodies carry out equivalent work.

Lessons: Accreditation of certification bodies can increase the credibility of assessments.

- National accreditation services may work to different standards.
- There is currently no established global accreditation service for natural resource schemes.

3.3.2 Public Inputs

Consultation and the provision of information by the public allow interested parties to have a direct involvement in the certification process rather than depending entirely on the competence of the certification and accreditation bodies. Especially where the implementation of the standard and assessment of compliance against the standard have been controversial, providing opportunities for public inputs can strengthen the process. This could occur at a number of points in the process:

- public consultation before and during assessment
- through a peer review process for assessment reports
- through a formal complaints procedure allowing stakeholders to comment on individual certificate-holders' performance
- through a formal complaints procedure allowing stakeholders to comment to the accreditation body on certification bodies' performance
- through the publication of the results and public reports about the findings of assessment and monitoring visits.

Experience from other sectors: Public inputs to FSC and organic certification

While most forest certification schemes require some public input to their process, only the FSC has developed the process described below. The aim is to ensure that certification under the FSC scheme is open and transparent. It is notable that this level of public input are not demanded in organic agriculture. There are probably two reasons for this:

- organic standards are predominantly technical in nature. They do not involve a balance of values to the extent of other natural resource stewardship standards;
- organic production and certification have been small scale so far, in contrast to some large-scale, high impact forestry operations.

The FSC requirements for public information and consultation have developed during the past 5 years. Although the FSC initially had some requirement about public information, the type of information was not specified. Some NGOs felt that the information provided by certification bodies was not appropriate or sufficient. This led to some of the most acrimonious disputes about the application of FSC certification. As a result, the FSC requirements were changed to specify that assessment reports must provide information on compliance with every Principle.

FSC requirements for public inputs and consultation are essential for the credibility of the scheme. However, it is also extremely expensive and time-consuming. The requirements for balancing potentially conflicting public inputs is stressful for companies, certification bodies and the FSC.

Lessons: Public inputs to the assessment process can give extra credibility to the process, especially in controversial sectors.

- it needs to be made clear to all parties what they can and cannot expect from the process
- provision of public information and mechanisms for public input to the process is time-consuming and expensive.
- clear procedures are needed for when and how public input should be sought.

4 Certification and Mining: The Options

A certification scheme consists of setting a standard and evaluation of compliance with that standard. A certification scheme could be designed to apply at any stage in the chain from the mining operation to the consumer. When considering the development of a certification scheme for the mining and minerals sector, it is important to consider which parts of this chain need to be certified and for what.

A certification scheme offers reassurance to a particular target audience that a know standard is being met. We have already discussed who the target audience and stakeholders may be in section 2.1. As mentioned in section 3.2, there are two main objectives for the certification of mines:

- to reassure a target audience that a high standard is already being met. This scheme identifies and rewards excellence, but provides few incentives for poor performers.

- to distinguish various levels of performance and treat them differently. This scheme provides incentives for improvement of poor performers.

The design of the standard and the evaluation system will both be affected by the answer to this question.

This section discusses some of the issues related to the certification of mines and production processes, and try to highlight the main issues which need to be considered.

A certification scheme could operate at a variety of levels, including the individual miner, a mine operation, a company, or a region. At what level should compliance with the standard be assessed? The advantages and disadvantage of the **levels of certification** are discussed in section 4.1.

One of the major concerns about certification is how much will it cost? The costs of certification assessments are largely dictated by the time required to carry out an assessment. The indirect costs of meeting the standard may be higher than those of certification. **What does it cost** is discussed in section 4.2.

Mining, like many natural resource sectors, is very varied. There is enormous diversity of scales and types of mining operations. How a single certification scheme can apply to all **scales and types of mines** is discussed in section 4.3.

Many certification schemes aim to allow certified organisations to use their certified status to market for their products. Certification of the 'chain of custody' allows the consumers to be sure that the products they buy actually originated in a certified operation. Chain of custody certification permits product labelling. **Chain of custody** is discussed in section 4.4.

The environmental and social impacts of the minerals sector extend beyond the limits of the mine itself. Production processes may have important impacts themselves. Should a certification scheme apply only to the mine site, or should it be extended to the processing chain? **Mines or production** processes is discussed in section 4.5.

4.1 Levels Of Certification

Mining operations exist on a wide range of scales, from the small artisanal mine at a single site, through to large corporations with multiple sites in several countries. At what level should a certification scheme be designed to work? What are the pros and cons of assessment at different levels and who holds the certificate?

Individual miners working on a small scale, could potentially be certified, but the costs are likely to be very high. This is because there are certain fixed costs of certification, such as time getting to and from a field site, or fixed overhead costs, which are disproportionately large for small operators. Very small scale mines might be more appropriately certified as part of a group certification scheme (see below).

A mining operation can be assessed to evaluate whether that particular mine is in compliance with a standard. This has the advantage of simplicity, in that there is no doubt

about what has or has not been assessed. The operation is generally controlled by a single operator who is responsible for implementing any management changes needed in order to comply with the standard.

Where product labelling is envisaged, certification of specific geographically defined mines would be the correct level for certification.

Experience from the forestry sector: Forest management unit level certification and labelling.

In the case of FSC certification, products which carry a label declaring their certified status, must derive from a specific, certified forest. FSC certified products carry a statement such as: *The wood in this product comes from well managed forests independently certified in accordance with the rules of the Forest Stewardship Council*'. In order to carry such a label, it must be known that the specific components contained in that labelled product can be traced back to a known, certified forest.

A specific issue for the certification of mines relates to decommissioning. At the time when an assessment of a mine is carried out, the operation may have plans for dealing with decommissioning. However, by the time decommissioning arrives, that particular mine no longer needs certification, so there is little leverage for ensuring that decommissioning plans are fully implemented. Environmental and social impacts of a mine may continue long after the mine itself has closed. Certification at the level of the mining operation needs to consider how the impacts that outlive the productive life of the mine can be incorporated.

In the case of certification of the mining operation, the certificate would be held by the management of the mining operation.

Certification of a mining company (either within one country or internationally) may be an attractive option for a scheme aimed at financial institutions that want to invest in companies without specifying which mining operation. Certification of a company's overall environmental management systems could be carried out against a process or performance based standard (see section 2.3). However, certification at the company level, without assessing performance at the level of the mine itself, will not provide assurances to stakeholders that particular environmental and social standards are actually being met in the field.

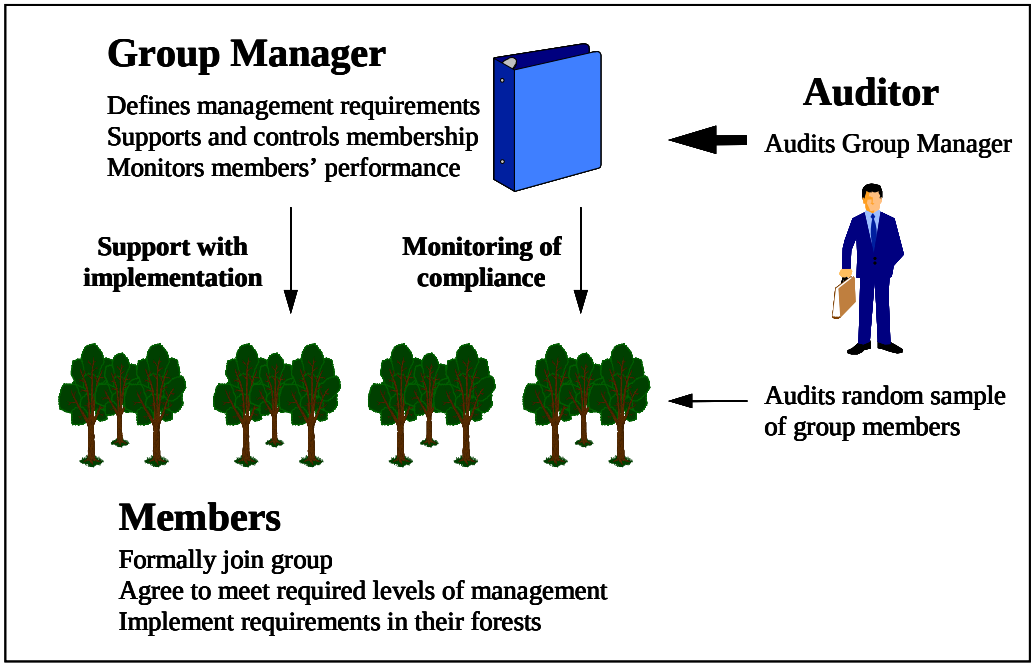
A combined standard, which is assessed both at the level of the company and on the ground in specific, defined sites would both provide information about the performance of the company as a whole and its individual sites. Certification at the level of the company would provide useful information about the level of environmental performance, and would provide a system for improving performance.

This type of scheme potentially deals with the issue of decommissioning of individual mining operations, because the company is still the object of certification. However, this type of scheme must define how it would deal with a company which has several mining operations which do comply with the standard, but also some which do not. If a company with several sites achieves certification, and then one site lapses, what does this mean for the company certification as a whole?

In the case of certification of a mining company, the certificate would be held by the company as a whole.

Certification at the regional level might be a useful option, particularly where there are a large number of small mining operations. A regional certification scheme must have regional control and management, through government, industry or a miners' associations. Regional certification is a type of 'group certification' see Box 4.1 below.

Box 3.1 Experience from the forestry sector: Group certification schemes



Group certification schemes have been developed in both organic and forestry sectors. A group consists of a group manager who defines the requirements for membership, supports and coordinates the group and monitors group members to ensure they comply with the standard. Certification assesses the management of the group by the group manager (ie. is management adequate to ensure the standard is met?) and visits a sample of the group members' sites. This means that the certification costs for each individual operator are lower and they can benefit from some economies of scale.

As with the certification of companies, an important consideration for this type of certification is how the scheme deals with failures by individual operations. It needs to be clear the certification of all the whole region is jeopardised by the failure of a single operation: it is not sufficient simply to expel the operation which is found to be failing.

In the case of regional certification, the certificate is held by the group manager. Individual operations do not receive their own certificate in group schemes, and are only considered certified whilst within the management structure of the group scheme.

Key points: Certification can operate at a range of levels, from individual small-scale miners to large scale international companies.

- Certification of individual small-scale miners would be expensive, and may be better considered as part of a regional or group scheme.

- Certification at the level of the mining operation has the benefit of simplicity and control.
- Certification of companies without assessment of mining operations on the ground does not provide assurance of actual performance levels.
- Certification of mining companies, combined with field checking performance of individual mining operations, might be appropriate for financial institutions

4.2 What Does It Cost?

Certification costs can be separated into two types: direct costs of the assessment and the costs of improvements in management to meet the standard. The direct costs of certification are almost all related to the time needed to carry out an assessment. Indirect costs are potentially higher, but more variable.

Direct costs of certification depend on:

- availability of certification services in-country. This is related to the ease and cost of accreditation. If accreditation is difficult or expensive, smaller certification bodies may be excluded. Certifiers then need to travel large distances, increasing time and travel costs, as well as entailing international consultancy rates.
- the requirements of the standard. A longer, more detailed standard requires more assessment time in the field. Performance standards, which require expert judgement on whether they are being met, require highly qualified teams for assessment, increasing costs. Process standards, which relate to fairly uniform management processes, require smaller teams and less expertise, and are therefore cheaper to assess.
- requirements for consultation and transparency in the certification process. If certifiers are required to carry out extensive stakeholder consultation, engage peer reviewers, or produce lengthy public documents, the cost will be increased.

Indirect costs of certification might relate to the need for training, improved equipment, improved working conditions, investment in local communities, external assistance to identify improved practice, or on-going costs of monitoring, among others. Indirect costs of certification are affected by:

- the level of performance and management processes required by the standard.
- the level at which an organisation starts.

Key points: There are direct and indirect costs to certification.

- direct costs are mostly related to the time needed to carry out an assessment.
- the biggest costs for operations wishing to get certified may be the indirect costs of meeting the standard.

4.3 Scales And Types Of Mines

One of the major challenges facing certification schemes is to make certification accessible to a variety of scales and types of operations. In particular, smaller operations and those in more remote regions tend to have more difficulty gaining access to certification. Often these barriers are related to the disproportionately high costs of certification for smaller operations, compared to larger ones.

4.3.1 Small Scale Mining And Certification

An analysis of the elements of forest certification which create constraints for small forest owners[2], provides some useful guidance for making a certification scheme accessible to small operations. All parts of a certification scheme – accreditation, certification and the standard itself – can create barriers.

The standard itself may create barriers for smaller operations. A standard which is a compromise between a number of interest groups, often ends up written in difficult and convoluted language. This is intimidating for people who are not accustomed to dealing with a lot of documentation. Standard development processes are also often dominated by the voices of the larger operations, and the standard may be written in a form which applies more clearly to large operations. NGOs are often more concerned about the impacts of large operations, so they focus on these. Some requirements may not apply to smaller or less common operations or it may not be clear how they apply.

During standard development it is therefore important to:

- ensure the standard is written in clear and simple language
- define what a small operation is
- define which requirements apply to small operations and which do not
- provide guidance on how to apply requirements at a small scale.

Apart from the standard itself, the main barrier to certification for smaller operations is the cost. These may be due to the accreditation or the certification costs. Accreditation costs might be limited by:

- the use of existing national accreditation services,
- providing 'generic' certification systems for prospective certification bodies, to reduce the costs of developing their own systems;
- the use networks or partners by existing accredited certification bodies.

Certification costs for smaller operations might be limited by:

- reducing the need for stakeholder consultation and transparency for smaller operations

[2] Nussbaum, R., *et al*, An analysis of current FSC accreditation, certification and standard-setting procedures identifying elements which create constraints for small forest owners. ProForest, June 2001.

- developing group certification schemes.

4.3.2 Types Of Mining And Certification

Different types of mining operation may be qualitatively different, so that different rules apply. However, it is important for outside credibility that the different rules all fall under a common scheme, to avoid a proliferation of schemes and confusion among consumers, financial institutions or other target audiences (see section 2.5).

One certification system which fits all types of operation worldwide needs an over-arching structure and guidance on how to apply it to different operations. This could take the form of:

- a generic performance standard which could be adapted for a range of conditions and operations, and a process for interpretation for local conditions or types of operations (see section 2.4)
- a process standard, linked to a series of guidelines or requirements for different operations, which set the performance standards for each operation.

Key points: A single certification scheme can apply to a variety of scales and types of operation.

- the standard must be written in clear, simple language and which can be easily applied to small and diverse operations
- it should be clearly defined which requirements apply to which scales and types of operation
- specific dispensations could be made in the certification process for small operations
- a mechanism is needed for interpretation of a generic standard for particular operations

4.4 Chain Of Custody

Many certification schemes aim to allow certified organisations to use their certified status to market for their products. The chain of custody is the path which products take from their place of origin to the customer, including all manufacturing, transportation, and distribution links.

Certification of the chain of custody allows the path to be traced and verified. This allows the customer to be sure that the product s/he buys actually originated in a certified operation. Chain of custody certification permits product labelling. Without it, on-product claims cannot be made, because they cannot be verified.

Certification of the chain of custody for mineral processing would be complicated. Assessment of the chain of custody has to be carried out at every stage where mixing with uncertified products could occur, so the more complex the chain, the more costly and difficult it is to certify it.

Given the complexity of the chain, and the lack of integration in the mining and processing sectors, chain of custody certification and labelling may not be appropriate. It is only important for a retailer/ consumer driven scheme. However, even complex chains can be assessed for chain of custody. The FSC percentage-based labelling rules allow products which contain a mixture of certified and uncertified materials to carry an FSC label, within certain specifications.

Key points:

- If labelling of final products is a desired outcome of the scheme, a system for tracking and certification of the chain of custody is necessary.
- in a complex chain, chain of custody certification will be expensive.

4.5 Mines Or Production Processes?

So far we have discussed only the certification of mining operations With the growing interest in life cycle assessment there may be interest in extending a scheme to the production process. As yet, most interest in a certification scheme for mining has focussed on certification of the mining process itself. This is largely for two reasons:

- mining itself is high profile and controversial and is therefore a higher priority for environmental NGOs, consumers and many other stakeholders;
- mineral processing and the manufacturing chain are very diverse and would be extremely difficult to include under a single certification scheme.

The advantage of extending a certification scheme beyond the mining operation itself is that processing has important environmental and social impacts. A certification scheme aimed at these processes might help to improve standards and provide reassurances to consumers and other stakeholders about the entire process.

However, while there might be some merit in the development of a certification scheme, which includes such processing, the costs for most minerals, are likely to outweigh the benefits. The number of variables which might be included, covering the direct environmental and social impacts, energy use and other physical inputs, in a vast array of processing and manufacturing, would be impossible to include within a single, credible certification scheme.

NGOs are more focussed on the certification of mines themselves because mines are more contentious. The report, 'Mining Certification Evaluation Project' by WWF-Australia, proposes the certification of mines and, if possible, the incorporation of integrated mining/processing operations, but they consider that even this may turn out to be too complex. Where there are integrated one-site operations, assessments could perhaps be made. Where processing is multi-site and multi-company, certification assessments would be very difficult.

If a certification scheme is developed which does not include the assessment of production processes, the boundaries to the scheme need to be clearly defined. In the initial stages of a certification scheme the easiest cut-off point would be the mining site itself. This would mean:

- integrated operations on-site would be included,
- operations off-site would be excluded.

A post-extraction certification scheme may not be appropriate for most minerals. However, there may be some merit in certification of post-extraction management of particular high value, niche products, such as jewellery. The growing campaign for a certification scheme for conflict diamonds, for instance, aims to exclude diamonds which are illegally produced and traded.

In this case, there are moves to legislate in the USA to prohibit the import of conflict diamonds. This is not yet a consumer driven issue; however, one of the aims of the legislation is to pre-empt consumer and NGO actions to boycott all diamonds, by excluding the illegal conflict sources. As the 'Clean Diamonds Act' Bill of 22 June 2001 states;

> Without effective action to eliminate trade in conflict diamonds, the trade in legitimate diamonds faces the threat of a consumer backlash that could damage the economies of countries not involved in the trade in conflict diamonds and penalize members of the legitimate trade and the people they employ.

Key points:

- mining is high profile and controversial and is a higher priority than production processes for environmental NGOs and many other stakeholders;
- mineral processing and the manufacturing chain are very diverse and would be very difficult to include under a single certification scheme.
- the boundaries to the certification scheme need to be explicitly set.
- for high profile, high value, niche product, a post-extraction certification scheme might be appropriate.

5 Conclusions

This report has set out some of the questions which need to be considered in developing a standard and evaluating compliance in natural resources sectors. In this conclusion we offer a summary of the issues discussed and the major implications of these for the design of a standard and certification scheme for mining.

Table 5.1 outlines a series of questions, offers options for each one and summarises the implications of each. Each question is cross-referenced to the sections which can provide more background to the issues. We have particularly focussed on the options which may be appropriate in assisting financial institutions to differentiate between companies that manage sustainability well, and those which do not.

Table 5.1 Options and Implications for mines

(NB. Arrows indicate that a range of options exists, not only those shown)

Question	Probable options	Implications for a certification scheme
Who is it for? *section 2.1*	Direct users only	Focus on content. Standard mainly for internal use; development process involves mainly within company or sector; quick and cheap to develop.
	Wide target audience	Focus on credibility. Standard development needs a high level of public input; needs to convey a simple message, slow and expensive to develop.
What are the objectives? *section 2.1*	To identify existing excellent practice	Incentives focussed on achievement of full compliance; requirements set at a demanding level
	To distinguish various levels of performance, and encourage improvement	Incentives focussed on improvement; a modular standard provides framework.
Who develops the standard and how? *section 2.2*	Internal technical committee	Focus on issues of importance to the company or sector; little credibility with external stakeholders; may be adequate for direct users. Quick and cheap process.
	International multi-stakeholder process	Balance of stakeholder interests needs to be built into the process; increases credibility of standard with external stakeholders Slow and expensive process.
Is high credibility with external stakeholders essential? *section 3.1 and 3.3*	Essential	Balanced stakeholder involvement in standard development; 3rd party independent assessments; formal certification system with accreditation and opportunity for public inputs.
	Important	Selected stakeholder involvement in standard development; 2nd or 3rd party assessment with some public input or consultation
	Not important	Technical process for development of standards; 1st or 2nd party assessment of by direct users of results

What type of standard is needed? *section 2.3*	Process standard	Cheap and quick to develop and assess; does not balance conflicting values or provide guarantees of actual performance; provides framework for improvement of management systems.
	Performance standard	Expensive and slower to develop and assess; needs local interpretation; gives guarantees of good actual performance.
	Combination process and performance	Generic process requirements combined with locally defined performance requirements enables generic principles to be locally defined.
Who evaluates compliance? *section 3.1*	1st party	Mechanism for identifying non-conformances with standard; Increases internal understanding; cheap but little external credibility
	2nd party	Provides information for a specific purpose; helps build relationships between companies; may be relatively cheap.
	3rd party	Independence and credibility; brings wider experience and new insights; may not focus on specific issues; may be more expensive.
What sort of assessment process? *section 3.2*	Make-or-break	Identifies and rewards excellent practice which complies with the whole standard. Provides a simple, clear message to target audience.
	Step-by-step	Encourages improvement and provides incentives for poorer performers; more complex message for target audience.
What level of assessment? *section 4.1*	The mining operation	If linked to a performance standard gives a guarantee of the outcomes at a particular site. Enables product labelling. Decommissioning of mines may be problematic.
	The company	Easier for investment purposes, but without assessment of specific sites provides no guarantees of performance. Good if combined with assessments of mining operations.
	Regional	Requires regional management to ensure standards are implemented. A good option for including small mines in a group scheme.

What are the limits to the scheme? *section 4.5*	The mine site	Practical; potentially significant environmental and social impacts of processing excluded; application inconsistent between integrated single site companies and multi-site companies.
	The production process	Very complex and diverse. Probably only feasible for high value, niche products.
Is chain of custody certification needed? *section 4.4*	Labelling of products is desired	Allows consumers to distinguish products from well-managed sources. Certification of the chain of custody from the mine to the final consumer is necessary.
	Labelling of products not needed	No chain of custody certification necessary. Scheme will have lower public profile.